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ABSTRACT

The capability of 14 interpersonal dimensions to predict dyadic communication contexts was investigated in this study. Friend, acquaintance, co-worker, and family contexts were examined. The interpersonal valence construct, based on a coactive or mutual-causal paradigm, encompasses traditional source-valence components (credibility, power, interpersonal attraction, and homophily) plus the factorially distinct components of trust and satisfaction. Multiple discriminant analysis models were used to evaluate questionnaire data from 194 subjects. Eleven interpersonal valence dimensions were used in the predictive equation; 9 of these 11 dimensions were found to be significant predictors of dyadic communication contexts. Methodological considerations and limitations of the present study are discussed. (Author/AA)

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Interpersonal Valence Dimensions as Discriminators of Communication Contexts: An Empirical Assessment of Dyadic Linkages

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Abstract

This study investigated the predictive capability of 14 interpersonal valence dimensions to dyadic communication contexts, a nominal level criterion variable. Friend, acquaintance, co-worker, and family contexts were examined. The interpersonal valence construct, based on a coactive or mutual-causal paradigm, encompasses traditional source valence components -- credibility, power, interpersonal attraction, and homophily -- plus the factorially distinct components of trust and satisfaction. Multiple discriminant analysis (MDA) models were used to evaluate questionnaire data from 194 subjects. Eleven of the 14 interpersonal valence dimensions met traditional a priori factor analysis criteria, as well as Kaiser's measure of sampling adequacy, and were entered into the MDA equation. Nine of these 11 dimensions were found to be significant predictors of dyadic communication contexts ($p < .001$). Future research isolating dyadic communication contexts and further developing reliable and valid process measures of the interpersonal valence components are needed. Methodological considerations and limitations of this study are also discussed.

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Interpersonal Valence Dimensions as Discriminators of Communication Contexts: An Empirical Assessment of Dyadic Linkages[1]

The concept of source valence has received much attention by human communication researchers. Briefly, source valence refers to the perceived characteristics of an individual which serve to determine the affective bonds or attitudes that others hold for that individual. Typically, researchers have treated source valence as four multidimensional constructs: source credibility, attraction, homophily, and power (McGuire, 1969; V. Lashbrook & McCroskey, Note 1). Recent research, however, has begun to include other dimensions in the theoretical development of the source valence construct; V. Lashbrook (Note 2), for example, examined dimensions of perceived interpersonal trust and leadership in conceptualizing source valence. The rationale for the inclusion of additional dimensions is that no adequate theory of source valence has yet to be developed and that other, relevant person perceptions exist (cf. Hastorf, Schneider, & Polefka, 1970). Moreover, V. Lashbrook and McCroskey (Note 1) argue that future research in this area should achieve two goals: establish other source valence dimensions and determine the relative importance of these dimensions for various contexts. Specifically, Lashbrook and McCroskey state, ". . .more research to investigate the relative importance of source valence dimensions in a variety of communication contexts is needed." It is surprising to note that, apart from the work of King (1973) and Wheeless and Grotz (in press), no such contextual studies have been reported in the communication literature. King's research, however, fails to examine source valence dimensions in terms of contextual dyadic relationships; Wheeless and Grotz, while explicitly concerned with dyadic relationships, did not regard their research to be contextual in nature.

The present study is intended to examine 14 source valence dimensions, which have been reconceptualized and recast as the broader construct of interpersonal valence. Interpersonal valence refers to the set of dimensions along which affective bonds between individuals are determined and sustained. The predictive power of this new construct is tested across four dyadic communication contexts: acquaintance, friend, co-worker, and family. The theoretical foundation for the development of the interpersonal valence construct evolves from a coactive (cf. McCroskey & Wheeless, 1976) or mutual-causal paradigm (Fox, Pate, & Pondy, 1976), an alternative to the one-way causal paradigm which currently dominates the literature. One-way causal models are limited to receiver perceptions of a source, while coactive or mutual-causal paradigms assess the relationship itself. We would argue that over reliance on a one-way causal paradigm is invalid and that a process oriented, reciprocal influence model (cf. Hollander & Julian, 1969) or a reciprocally causal relationship (cf. McCroskey, Daly, Richmond, & Falcione, Note 3) allows for more accurate and meaningful prediction of dyadic communication relationships.

Communication Contexts

Few would disagree that the environment within which behavior occurs serves as a major force in shaping that behavior. The life works of B. F. Skinner, Kurt Lewin, Fred Fiedler, among others, have well demonstrated this premise. However, what is less certain is the manner in which such influence works. Despite acceptance of this basic premise and the forwarding of a number of models and relevant theories (cf. Burgoon & Jones, 1976; Wright, 1969), little is known or agreed upon regarding how various communication contexts influence

a person's attitudes and behaviors. The major premise of interaction theory, for example, is that one defines oneself and his/her environment through interaction with others, yet interaction theory fails to demonstrate how such a definitional process varies across measurably distinct environmental contexts. Similarly, role theory posits that behavioral and attitudinal expectations develop about interpersonal relationships, yet fails to specify how these expectations vary as the relationships vary. The long debated issue of the relative efficacy of heredity versus environment among social psychologists serves as further example of this issue.

McCall's (1970) approach to the study of interpersonal relationships, however, built a framework for identifying communication contexts. McCall analyzed interpersonal relationships as a type of social organization having substance, culture, and structure. In this formulation, substance refers to the type of bonds which unite people in a relationship, culture refers to the norms or expectations of behavior which are derived from society, and structure refers to a person's perception that certain behaviors are appropriate only for a given relationship. McCall suggests that one's perception of structure is shaped by the interaction of personal role identities and group roles; the relative weights of the personal role identity and the prescribed group role subsequently determine the nature of the relationship. McCall's approach supports the notion that perception and communication are dependent upon expectations associated with a given contextual relationship.

A logical conclusion from the previous discussion is that to understand human communication behavior, it is necessary to examine the interpersonal context within which the behavior occurs. This conclusion was also reached in the communication literature by a number of researchers (Berger & Calabrese, 1975; Bochner, 1976; Eadie & Kline, 1976; McCroskey & Wheeless, 1976; Pearce, 1976; Swanson & Delia, 1976; Watzlawick, Beavin, & Jackson, 1967; Bodaken & Wenburg, Note 4) who argue that interpersonal communication is contextually bound. Bochner, for example, argues that "there are many interactional contexts which influence behavior and experience" (1976: 381). McCroskey and Wheeless (1976) have even suggested that both the content and context of the communication that exists for a given dyad differs from other dyads. Moreover, they maintain that a dyad is a constantly changing system and that its members are changed by the very formation of the dyad. However, when considering interpersonal communication phenomenon, contextual theorizing, measurement, and testing have been noticeably lacking. The present research seeks to fill this void by examining the following dyadic communication contexts -- acquaintance, friend, co-worker, and family -- as they relate to the interpersonal valence construct. We would argue that these distinct contexts are not conceptually independent, although they may be pragmatically so.

Acquaintance context. Typically nonintimate, nonpersonal, descriptive, and primarily involves the exchange of demographic information (Davis, 1973; Berger, Note 5). Structure in acquaintance relations flows from group roles and is dependent upon perceptions of status, power, and authority structures.

Friend context. Characterized by ascription, commitment, attachment, investment, and reward dependability. Unlike acquaintance relationships, friends develop personal role identities rather than social roles (Brenton, 1974; Duck, 1973).

Co-worker context. Characterized by ascriptive and reward dependency bonds. By definition, these relationships depend on formal role structures. Therefore, status, power, and authority structures should be more important to co-worker relationships than other communication contexts tested (cf. Cartwright & Zander, 1968).

Family context. Generally refers to people who are genetically or legally related. Family members are bonded by ascription, attachment, and structure. Their personal role identities are more prominent than their prescribed social roles (cf. Bochner, 1976). Internal structures are more highly developed, given the personal nature of family relationships (Znaniecki, 1965).

Interpersonal Valence

The interpersonal valence construct is conceptualized to include traditional source valence components -- credibility, attraction, homophily, and power -- plus two additional components -- trust and satisfaction. Interpersonal valence encompasses an array of interlocking components and dimensions of interpersonal perception. We would argue that these components may be better understood in terms of a coactive or mutual-causal paradigm (cf. Fox et al., 1976) and are hypothesized to fluctuate across differing dyadic contexts. What we wish to denote with the interpersonal valence construct are the significant dimensions of interpersonal behavior. Again, the working paradigm of the interpersonal valence construct enables us to extend the source valence construct by focusing on transaction rather than on simple one-way exchange.

Credibility. Source credibility has received a generous amount of research attention. This construct has been defined in two important ways. First, it has been operationally defined and measured as a multidimensional attitude toward a communication source (cf. McCroskey, Jensen, & Todd, Note 6; McCroskey, Jensen, & Valencia, Note 7). As such, credibility has been found to interact with messages and mediate comprehension (Wheeless, 1974a; P. Andersen, Note 8), immediate recall (Wheeless, 1975), and attitude change (K. Andersen & Clevenger, 1963; McCroskey, 1968; McGuire, 1969; Wheeless, 1974b; V. Lashbrook, Note 9). Second, credibility has been defined as a constraint on the amount of information people process about communication sources (W. Lashbrook, Snavely, & Sullivan, in press; W. Lashbrook, Daley, Hamilton, & Todd, Note 10; W. Lashbrook & V. Lashbrook, Note 11; Sullivan, Garrison, & Richmond, Note 12). This latter research found that perceptions of character, competence, composure, extroversion, and sociability, as forwarded by the work of McCroskey and his associates, are directly related to both the kind and amount of information people process about highly credible sources. Since people respond to distinct levels of credibility in unique fashions, it is reasonable to expect that the interpersonal context in which these responses occur would also affect perceived levels of credibility. More specifically, we would expect judgments of credibility to distinguish between various kinds of dyadic communication contexts. Based on this expectation, the present research hypothesized that:

> When cast as predictors in a multiple discriminant analysis equation, the dimensions of credibility, will significantly determine dyadic communication contexts.

Since credibility has been consistently operationalized as a multidimensional construct consisting of five factorially distinct evaluative dimensions, five subhypotheses were advanced and served as independent tests

of the hypothesized relationship, upon meeting each of our a priori measurement criteria.

H_1: When cast as a predictor in a multiple discriminant analysis equation, character will significantly determine dyadic communication contexts.

H_2: When cast as a predictor in a multiple discriminant analysis equation, competence will significantly determine dyadic communication contexts.

H_3: When cast as a predictor in a multiple discriminant analysis equation, composure will significantly determine dyadic communication contexts.

H_4: When cast as a predictor in a multiple discriminant analysis equation, extroversion will significantly determine dyadic communication contexts.

H_5: When cast as a predictor in a multiple discriminant analysis equation, sociability will significantly determine dyadic communication contexts.

Attraction. Interpersonal attraction is a conceptually broad based component. Berscheid and Walster (1969: 2), in a review of the attraction literature, note that almost all of the research on interpersonal attraction investigates "variables which affect an individual's positive or negative attitude toward another person." In a further review by McCroskey and McCain (1974), interpersonal attraction was operationally defined and measured as a multidimensional construct composed of physical, social, and task dimensions.

Research summaries (Berscheid & Walster, 1969; McCroskey, Larson, & Knapp, 1971) indicate cognitive consistency theories provide a primary base for researching interpersonal attraction. These theories posit differences in receiver orientations are a function of the attractiveness of a communication source. However, other research has shown that physical attraction is more important in establishing acquaintance relationships than in perpetuating social or task interactions (Berger & Calabrese, 1975; McCroskey, Daly, Richmond, & Cox, 1975; Berger, Note 5). In friend or family dyadic contexts, we would expect social attraction to be the more critical dimension of the relationship; in co-worker dyadic contexts we would expect task attraction to dominate. Direct evidence for these predictions, however, is not yet available in the literature. Therefore, the present research proposed the following hypothesis to test this relationship:

> When cast as predictors in a multiple discriminant analysis equation, the dimensions of attraction, will significantly determine dyadic communication contexts.

Attraction is also a multidimensional construct; three subhypotheses were advanced, pending the acceptable attainment of the a priori measurement criteria.

H_6: When cast as a predictor in a multiple discriminant analysis equation, physical attraction will significantly determine dyadic communication contexts.

H_7: When cast as a predictor in a multiple discriminant analysis equation, social attraction will significantly determine dyadic communication contexts.

H_8: When cast as a predictor in a multiple discriminant analysis equation, task attraction will significantly determine dyadic communication contexts.

Homophily. One of the most basic interpersonal communication principles is that source-receiver similarity (homophily) increases the likelihood of communication attempts and promotes communication effectiveness (McCroskey et al., 1971; McCroskey, Richmond, & Daly, 1975; Rogers & Shoemaker, 1971; P. Andersen & Todd, Note 13).

A notion central to this conceptual definition is that homophily refers to perceptions of shared attitudes. Researchers have separated these perceptions into three distinct dimensions: attitude, background, and morality (value) homophily (McCroskey, Richmond, & Daly, 1975). Rogers (1973) suggests that directional homophily perceptions are altered as the amount of communication between people increases and as their relationship becomes more stable. In other words, the more similar two individuals' perceptions are, the more likely they will communicate. This finding deserves clarification in light of Berger and Calabrese's (1975) theorizing about interpersonal communication relationships. This body of research and theory suggests that frequent interaction during the acquaintance stage of a relationship results in greater perceived similarity between individuals. However, after this initial stage -- and, therefore, in other contexts -- variables other than homophily may better explain such changes or contextual alterations.

Since perceived homophily varies with the amount of communication, we would expect it to vary with the contextual nature of the communication relationship as well. Based on this expectation, the present research hypothesized:

> When cast as predictors in a multiple discriminant analysis equation, the dimensions of homophily, will significantly determine dyadic communication contexts.

Similar to the constructs of credibility and attraction, homophily is a multidimensional construct. Likewise, separate hypotheses will be advanced, upon reaching acceptable measurement levels.

H_9: When cast as a predictor in a multiple discriminant analysis equation, attitude homophily will significantly determine dyadic communication contexts.

H_{10}: When cast as a predictor in a multiple discriminant analysis equation, background homophily will significantly determine dyadic communication contexts.

H_{11}: When cast as a predictor in a multiple discriminant analysis equation, value homophily will significantly determine dyadic communication contexts.

Power. In terms of person perception, power has been studied as a single global dimension (Clark, 1968; Collins & Guetzkow, 1964; McGuire, 1969), however, the measurement of interpersonal power typically has been ignored by communication researchers. To date, the only researchers in the communication field who have attempted to measure the power component have used V. Lashbrook's (Note 14) unidimensional instrument, which is composed of four semantic differential-type scales.[2] This instrument has facilitated, at best, limited measurement of power in empirical communication studies (cf. Garrison & Pate, Note 15).

Consistent with the work on power in other fields (cf. Zald, 1970) we would expect perceptions of interpersonal power to vary with different communication contexts. For example, assessments of the power of a communication source in a co-worker context should be quite different than assessments of power in an acquaintance context. Based on this expectation, the present research proposed to test the following hypothesis:

H_{12}: When cast as a predictor in a multiple discriminant analysis equation, the dimension of power will significantly determine dyadic communication contexts.

Trust. Early research (Hovland, Janis, & Kelley, 1953) defined credibility as the degree of confidence a person has of a communication source; trust was established as an important source related variable. Factor analytic techniques in human communication research often considered trust to be a factor of the multidimensional construct of credibility. Trust has been consistently operationalized as a perception of honesty and trustworthiness. Credibility researchers initially labeled these perceptions a safety factor (Berlo, Lemert, & Mertz, 1969) and a character-trustworthiness factor (McCroskey, 1966). In short, researchers have continued to define and revise the concept of trust, but have not attempted to measure the concept in dyadic contexts.

Recently, Wheeless and Grotz (in press) developed a unidimensional instrument to measure interpersonal trust and conceptualized this interpersonal valence dimension as ". . .a process of engaging in certain types of dependent behavior engendered by relevant, favorable perceptions of another person in a risky situation where the outcomes that are dependent upon that person are not known. As a consequence, interpersonal trust may be measured in experimental research as process, behaviors, perceptions, or situations."

One important outcome of the Wheeless and Grotz research is that interpersonal trust can now be reliably (r = .92) measured. A second outcome of this line of research is the finding that interpersonal trust varies across different dyadic contexts and was best examined from a perceptual vantage point. Finally, interpersonal trust was found to reference person perceptions of dyadic partners within different communication contexts. Consistent with these findings, the present research hypothesized that:

H_{13}: When cast as a predictor in a multiple discriminant analysis equation, the dimension of trust will significantly determine dyadic communication contexts.

Satisfaction. The concept of satisfaction has been researched primarily in organizational and industrial settings; these empirical assessments have centered upon perceived satisfaction in jobs and retirement (Hackman & Lawler,

1971; Porter & Lawler, 1968; Smith, Kendall, & Hulin, 1969). Satisfaction is often operationalized as feelings or responses to contextual situations (England & Stein, 1961; Porter & Roberts, 1976; Vroom, 1964). Although previous communication researchers have not examined satisfaction as a source valence dimension, sufficient research exists to indicate that the level of interaction with others moderates an individual's perceptions of satisfaction (cf. Roy, 1960). However, satisfaction, as studied in these settings, has not been examined from a coactive or mutual-causal paradigm.

Some interpersonal encounters may be satisfying, pleasant, and rewarding, while other encounters are dissatisfying, unpleasant, and punishing. When the level of interpersonal satisfaction is perceived to be too low, the relationship suffers. In behaviorist terms, Skinner (1969) would argue that in the continued absence of reinforcement or rewards, extinction of the behavior which perpetuates the relationship would occur. But the context within which interpersonal behavior occurs may itself serve to be rewarding. For example, the friend context may be especially rewarding for individuals with high affiliation needs (cf. McClelland, 1971). Thus, the level of satisfaction of a given dyadic relationship should vary with the contextual nature of the relationship.

It is important to distinguish between the level of satisfaction for either member of the dyad and the level of satisfaction of the relationship itself. We conceptualize the satisfaction dimension of interpersonal valence to embrace both of these levels, but the latter of these to be more applicable in a mutual-causal framework. The unit of analysis in a mutual-causal framework is the relationship itself, rather than an individual's directional perceptions of a communication source; interpersonal satisfaction is, therefore, conceptualized to be unidimensional in nature. This argument is similar to that forwarded by Wheeless and Grotz (in press) regarding the unidimensional nature of the interpersonal trust construct. Based on previous theoretical evidence, therefore, the present research hypothesized that:

H_{14}: When cast as a predictor in a multiple discriminant analysis equation, the dimension of satisfaction will significantly determine dyadic communication contexts.

Method

Subjects

One hundred and ninety four subjects were selected from five distinct populations -- business personnel, college students, fraternity and sorority members, hospital patients in an orthopedic ward, and older people in a retirement village -- in the community surrounding the University of Nebraska-Lincoln. Subjects within each of these populations were randomly drawn and were subsequently asked to evaluate the relationship with a particular person in a specific dyadic communication context.

Procedure

An initial step in the execution of the present research involved the development of contextual "inductions." Such inductions are common to communication research and normally refer to items or statements which induce a particular mind-set. The purpose of these inductions was to help provide a clear

frame of reference for the subjects in terms of one of his or her dyadic relationships. Four such inductions were constructed based on previous theoretical evidence and operationally defined as follows: (a) Acquaintance -- someone you've met recently but don't know very well. (b) Friend -- a close friend of yours, someone you know extremely well. (c) Co-worker -- someone you communicate with on a regular basis in your present job. (d) Family member -- someone you are genetically or legally related to through marriage.

Subjects were instructed to refer to an individual who would not occupy a dominant space in more than one communication context. Moreover, subjects were asked to reference and evaluate their relationship with a particular person in one of the four contexts and not to reference their interpersonal relationships in general. If a subject was assigned an unfamiliar context, then he or she exchanged questionnaires with another subject, or was given the next randomly ordered questionnaire that contained a familiar context.

The 14 interpersonal valence dimensions (character, competence, composure, extroversion, and sociability dimensions of credibility; physical, social, and task dimensions of interpersonal attraction; attitude, background, and value-morality dimensions of homophily; power; trust; and satisfaction) were operationalized and measured by 56 semantic differential-type scales and 15 Likert-type scales; each scale allowed seven response categories ranging from strongly agree to strongly disagree. Scale items corresponding to each dimension and component of the interpersonal valence construct are reported in Table 1. Data obtained from these scales were subsequently cast as predictors in a multiple discriminant analysis equation.

Insert Table 1 about here

Once the questionnaire instrument[3] and contextual inductions were developed, an experimental packet was prepared for each subject. Each packet included one of the four inductions, scales for evaluating the selected dyadic partner, and instructions for completing the scales. Packets were randomly distributed in the business, college, medical, retirement, and social populations selected for this study.

Statistical Analyses

Data were initially submitted to principal components factor analysis with orthogonal rotation, as determined by Kaiser's (1958, 1960) varimax criterion. The semantic differential and Likert scales were separated and submitted to an oblique rotation in order to achieve simple structure in the factor matrix (cf. Harman, 1967). The primary orthogonal factor analysis tested the extent to which each of the 14 interpersonal valence dimensions could be conceptualized as an independent factor. An orthogonal solution was predicted a priori, based on the previous research findings by P. Andersen (1975), McCroskey, Richmond, and Daly (1975), and P. Andersen and Kibler (Note 16) that traditional source valence dimensions are relatively independent. The secondary oblique rotations of both the semantic differential and Likert scales checked whether each scale item was capable of discriminating communication contexts, as a function of meeting a set of a priori criteria. (cf. Table 9 for factor correlations.)

A factor was considered a viable dimension of the interpersonal valence construct if it met each of the following criteria (cf. McCroskey & Young, Note 17): (a) Each factor required an eigenvalue of 1.0 or greater. (b) Individual scale items required primary factor loadings of .55 or greater with no secondary loading higher than .40. (c) At least 2 items were required to meet the primary and secondary loading criteria on each of the factors. (d) Each factor was required to have an internal reliability of .60 or higher. (e) Each factor was also required to meet criteria for existence based on a modified version of Catell's scree test (cf. Tatsuoka, 1971).

Reliability estimates for each of the viable factors were computed using NUNREL, a Statistical Analysis System program (Davis & Garrison, Note 18), which is based on Nunnally's (1967) reliability formula 6-18.[4]

Factor analysis data were then submitted independently to two statistical packages (the Statistical Analysis System, Barr & Goodnight, 1972; and the Biomedical Computer program P-4M, Dixon, 1975) as a check on the existence of factor structures. Kaiser's (1970) second generation LITTLE JIFFY program was included in the data analysis; this program computes Kaiser and Hunka's (1973) measure of sampling adequacy (MSA) as part of the Biomed package.[5] A MSA was computed for the most stable factor structure. Kaiser and Hunka (1973) interpret the strength of their MSA for factor analysis by arguing that good factor analytic data does not exist until the measure of sampling adequacy is in the .80s and excellent data does not exist until MSA reaches the .90s. We, therefore, adopted the .80 MSA level as an additional criteria for the adequacy of the sample for factor analysis.

Final Selection of Scales after Factor Analysis

Results of the orthogonal factor analysis initially indicated a 14 factor solution. From this analysis the dimensions of character, power, and value homophily failed to meet one or more of the previously established criteria for inclusion as a viable factor for further data analysis. The remaining 11 dimensions met each of the criteria. In short, four dimensions of credibility, three dimensions of attraction, two dimensions of homophily, and the unidimensional components of trust and satisfaction (cf. Tables 1 and 8) were found to be viable independent factors and were tested with the independent hypotheses.

The two additional oblique factor analyses were then conducted to check the existence of factors and determine their factor loadings. The first analysis was conducted on the 46 semantic differential-type scales which measured the remaining dimensions of credibility (competence, composure, extroversion, and sociability), homophily (attitude and background), trust, and satisfaction. The second analysis was conducted on the remaining 15 Likert-type scales which measured the three dimensions of interpersonal attraction. In total, 36 interpersonal valence items met each of the criteria, and thus could be used in the discriminant model.

Semantic differential-type scales. The oblique factor analysis of the 46 semantic differential scales (cf. Table 2) resulted in an eight factor solution accounting for 96 percent of the variance. The labels for these factors and Nunnally's (1967) reliability formula 6-18 are: sociability ($\underline{r}$ = .70), extroversion ($\underline{r}$ = .63), composure ($\underline{r}$ = .63), competence ($\underline{r}$ = .66), trust ($\underline{r}$ = .96), background homophily ($\underline{r}$ = .69), attitude homophily ($\underline{r}$ = .82), and satisfaction ($\underline{r}$ = .78). The MSA for the eight factor semantic differential-type scale solution was .88.

Insert Table 2 about here

Likert-type scales. The oblique factor analysis of the 15 Likert-type scales (cf. Table 3) resulted in a three factor solution accounting for 93 percent of the variance. The labels for these factors, and reliabilities are: task attraction (r = .76), physical attraction (r = .74), and social attraction (r = .69). The MSA for the three factor Likert-type scale solution was .91.

Insert Table 3 about here

Construct validity. Scales developed through factor analysis have factorial validity (cf. Cronbach, 1949), providing support for the construct validity of the interpersonal valence instrument. The obtained factor reliabilities established a viable means of measuring the interpersonal valence dimensions; such reliabilities insured an initial level of construct validity. Additionally, as later portions of this paper will indicate, the interpersonal valence scales were excellent predictors since they accurately discriminated dyadic communication contexts. Thus, substantial evidence exists for the predictive validity of the interpersonal valence construct.

Multiple Discriminant Analysis

Two multiple discriminant analysis (MDA) models (cf. Cooley & Lohnes, 1971; Tatsuoka, 1971) were used as tests of the hypotheses. The 11 interpersonal valence dimensions constituted the predictor variables for the initial analysis. The individual scale items, representative of conceptually independent factors, constituted the predictor variables for the second analysis. The criterion variable was communication context. A stepwise procedure was employed which selected statistically significant predictor variables (Rao, 1965; Sprent, 1969).

Results

Results of the data analyses are presented in two phases. Phase one represents primary tests of the hypotheses; MDA tested the effects of the 11 interpersonal valence dimensions which met each of the factor analysis criteria. Phase two tested the effects of the 36 items which represent the hypothesized relationships of the 11 viable interpersonal valence dimensions.

Phase One: Prediction from Interpersonal Valence Dimensions

The 11 interpersonal valence dimensions[6] were cast into a stepwise MDA equation. Results of this analysis generated nine significant ($p<.001$) contextual discriminators (See Table 4 for list of significant predictors). Physical attraction and background homophily were not significant discriminators of communication contexts and were, therefore, excluded from the model. The strength of the multivariate relationship of the remaining nine interpersonal valence dimensions, as measured by omega-squared corrected for sample size (Tatsuoka, Note 20), indicated that 19% of the variance was accounted for by the discriminant function. Multivariate F ratios for each discriminator, in the order which they entered the model, are reported in Table 4. This model

was used to generate a classification matrix (Table 5), which identifies percentages of correct contextual classifications.

Insert Tables 4 and 5 about here

A chi-square test based on the discriminant analysis classification matrix (Table 5) indicated that the correct assignment of subjects to the four communication contexts was statistically significant ($\chi^2 = 67.58$, $df = 9$, $p<.001$). Statistical power ($1-\beta$) was calculated at > .995 (cf. Cohen, 1969), using information gained from the obtained effect-size measure, mentioned previously, and the degrees of freedom of the first predictor entered into the nine variable MDA equation.

Phase Two: Prediction from Interpersonal Valence Items

Thirty-six interpersonal valence items were also cast into a stepwise MDA equation in order to maximize the predictive power of the interpersonal valence construct. Ten items failed to meet entry criteria into the model; as a result, this analysis generated 26 significant ($p<.001$) contextual discriminators. Multivariate F ratios for each item discriminator, in the order which they entered the model, are reported in Table 6. The resultant model was then utilized to generate a second classification matrix (Table 7), which identifies percentages of correct contextual classifications. The strength of the multivariate relationship of the remaining 26 interpersonal valence scales, as measured by omega-squared corrected for sample size (Tatsuoka, Note 20), indicated that 22% of the variance was accounted for by the discriminant function.

Insert Tables 6 and 7 about here

A chi-square test based on the discriminant analysis classification matrix for the second model (Table 7) indicated that the correct assignment of subjects to the four communication contexts was well beyond what might have been reasonably expected by chance ($\chi^2 = 166.36$, $df = 9$, $p<.001$). Statistical power ($1-\beta$) was calculated at >.995 (cf. Cohen, 1969) for the second model of 26 variables, again using the degrees of freedom from the first predictor and the information obtained from the multivariate effect-size measure.

Tests of the Hypotheses

It was predicted that the 14 dimensions encompassed in the six interpersonal valence components would be significant discriminators of dyadic communication contexts. Only 11 of the 14 dimensions met our a priori measurement criteria. Nine of the 11 viable dimensions were significant as predictors. Thus, five of the six interpersonal valence components -- credibility, attraction, homophily, trust, and satisfaction -- were found to be significant predictors dimensionally and by individual items. The power component did not enter the discriminant equation, and as a result, hypothesis 12 was unable to be confirmed. In short, nine of the 11 hypothesized relationships were supported by the results of this investigation.

Two additional observations are worth noting: (a) First, from an examination of dimension means in the 11 dimension equation (Table 8), mean scores in the co-worker context were lower than mean scores in other contexts for eight of the 11 comparisons. (b) Second, from an examination of Table 9, high correlations between factors indicated the existence of multicollinearity for a number of factors. These data are discussed in the following section.

Insert Tables 8 and 9 about here

Discussion

Interpretation of Statistical Tests

Multiple discriminant analysis indicated that interpersonal valence dimensions of credibility, attraction, homophily, trust, and satisfaction were significant predictors of dyadic communication contexts. As hypothesized, these dimensions significantly discriminated between the four contextual relationships. A significant multivariate relationship was found between the interpersonal valence predictors and dyadic communication contexts. Although the strength of the multivariate relationships is only moderate (19% for the dimensions and 23% for the items), it suggests that more sophisticated measurement needs to be included in future research.

An examination of Table 10 shows the interpersonal valence items were more precise predictors of communication contexts than were the dimensions. Thus, it only appears that the classifications by scale items and dimensions are isomorphic; this finding supports our rationale for the separate analyses (items and dimensions) which were conducted. From Table 10, we would recommend that researchers interested in determining correct contextual membership should utilize interpersonal valence items, rather than dimensions, as predictors.

Insert Table 10 about here

In both discriminant models, the co-worker context was correctly classified most often and the acquaintance context least often. One interpretation of this finding is that one's perceptions are more fixed and one's own uncertainty about the relationthip is reduced in long-term rather than in short-term relationships, as typified by the acquaintance context. Also in both discriminant models, the interpersonal valence dimensions of satisfaction and trust were the best predictors of communication contexts, although all discriminators were satistically significant at $p<.001$ (cf. Tables 4 and 6).

In short, 11 independent dimensions of interpersonal valence were identified in this study. Peer credibility (McCroskey et al., Note 7), interpersonal attraction (McCroskey & McCain, 1974), homophily (McCroskey, Richmond, & Daly, 1975), trust (Wheeless & Grotz, in press), and satisfaction (Garrison & Sullivan, Note 19) maintained factor structures found in previous research.

Methodological Considerations

It was expected a priori that 14 interpersonal valence dimensions would emerge as stable dimensions from factor analytic techniques. However, dimensions of character, value homophily, and power did not meet factor analysis loading criteria and were therefore excluded from further analysis.

Dimension loadings. An explanation for the failure of the character dimension to load is that two of the four items measuring this dimension had to be removed from data analysis because of typographical error in the instrument; if either of the two remaining items failed to load, as was the case, the dimension would not emerge as viable and stable. A similar explanation holds for the value homophily dimension, since this dimension had been measured with the two reliable items from the McCroskey, Richmond, and Daly (1975) study. Thus, we are unable to infer on the basis of these data that the dimensions of character and value homophily are not, in fact, equally viable dimensions of the interpersonal valence construct. Future research should examine these dimensions in similar dyadic contexts.

An explanation for the failure of the power dimension to load is that the power scales were not developed in a multigenerational sense. As a result, the reliability and predictive validity of the V. Lashbrook (Note 14) scales are subject to question. Support for the hypothesis concerning power was not found in the present research. Nonetheless, future researchers should not exclude the interpersonal power construct from consideration on the basis of the present research. The workings and measurement of this dimension deserve further attention.

Also, the number of sources considered in previous research may account for the loss of three interpersonal valence dimensions in the present study. Scales developed primarily by McCroskey and associates (McCroskey & McCain, 1974; McCroskey, Richmond, & Daly, 1975; McCroskey et al., Note 7) used a series of sources in order to measure directional perceptions of credibility, attraction, and homophily. When these scales are applied to the evaluation of another communicator in a particular dyadic context, the general factor structure may deteriorate. However, scales developed cross-contextually should subsequently stand up cross-contextually. In the present study, for example, the 10 items measuring trust had been developed cross-contextually by Wheeless and Grotz (in press); these items had significant primary loadings and the reliability of the factor was the highest (r = .96) of any factor meeting the a priori criteria (Table 2).

Data collection. The heterogeneous nature of the subjects selected for the present research may have contributed to the obtained results. Subjects drawn from business settings responded primarily in terms of a co-worker context, while subjects from retirement and social settings responded primarily in terms of a friend context. Such limitations should be controlled in future research. We agree with Babbie (1973) who suggests implicit stratification as a mechanism for solving the problems of homogeneity and heterogeneity in research. Stratified and random sampling insures that appropriate numbers of elements are drawn from homogeneous subsets of a population, rather than from the total population at large. We would recommend more stringent sample controls be used in future research on communication contexts.

Multicollinearity. Moderate to high correlations of orthogonal factors demonstrates multicollinearity or relatedness among predictor variables (Gordon, 1968). In previous research, multicollinearity has been found for source credibility (Aronson, 1972), interpersonal attraction and background homophily (Byrne, 1969), interpersonal attraction and attitudinal homophily (Berscheid & Walster, 1969), and numerous other dimensions of the constructs of source credibility, interpersonal attraction, and homophily (P. Andersen, 1975). Multicollinearity was found in the present research for several dimensions (Table 9), particularly for the dimensions of sociability, trust, and satisfaction (range = .40 - .45) and for the three dimensions of attraction (range = .43 - .46). Multicollinearity is problematic in that it contributes to significant error variance, thereby reducing the power of predictor variables. Future researchers should consider using factor weights rather than the dimensions themselves as predictors; such a procedure would minimize potentially high correlations between interpersonal valence predictors. Statistical independence may not be desirable, however, when empirical evidence suggests interrelatedness of interpersonal valence dimensions. P. Andersen (1975) and P. Andersen and Kibler (Note 16), for example, indicate the undesirability of utilizing statistically independent predictor variables when prior theoretical and methodological evidence suggests interrelatedness. In short, future researchers should weigh the advantages of using factor scores against the advantages of using other measurement techniques such as individual item scores, scores on the raw dimensions, or multidimensional scaling as representative of the interpersonal valence dimensions.

Summary and Suggestions for Future Research

Results of this study clearly indicate the viability and robustness (Rudner, 1966) of the interpersonal valence construct in dyadic encounters. Secondly, the present research both provides a means for the measurement of this new construct and serves as a link between its measurement and interpersonal communication behavior. Third, the dimensions of trust and satisfaction appear to be crucial to the further development of the interpersonal valence construct. Finally, the present research suggests several new directions for the communication field.

Future research is suggested in six important areas: (a) replicate and extend the present research in non-dyadic encounters and in a variety of communication contexts; (b) develop reliable measures of the interpersonal power component; (c) further test the constructs of power, character, and value homophily as viable interpersonal valence dimensions; (d) examine the importance of discrepant perceptions of dyadic members in various communication contexts; (e) examine the relationships between interpersonal valence and other concepts, such as organizational climate (cf. Pate & Sullivan, Note 21) and interpersonal solidarity (Wheeless, in press; Wheeless, Note 22); and (f) incorporate the construct of interpersonal valence into a theory of interpersonal communication.

A basic premise of the present research is that a coactive or mutual-causal paradigm provides for more meaningful understanding of dyadic linkages. An approach based on this paradigm has been partially tested in the present research; the full impact of coactive models has yet to be realized. To apply such a philosophy in human communication research calls for the development of reliable and valid process measures. The unit of analysis with such measures becomes the relationship itself, rather than merely directional perceptions of a communication source. Future research in interpersonal communication, and specifically in relational communication, which better utilizes a mutual-causal framework is needed to advance our understanding of the interpersonal valence construct and human communication theory in general.

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Footnotes

[1]Requests for reprints should be sent to John P. Garrison, Department of Speech Communication, The University of Nebraska-Lincoln, Lincoln, NE 68588. The authors wish to acknowledge The University of Nebraska Research Council, for financial support in part by URC Grant #85-010-552-04 to Larry E. Pate, Principal Investigator. We are indebted to Kathleen Garthright and Rodger Nelson for help in data collection and to Peter A. Andersen, Lawrence J. Chase, and John R. Wenburg for helpful comments on an earlier draft of this paper.

[2]The research conducted by Garrison and Pate (Note 15) is a recent exception; their research regarded interpersonal power as a multidimensional concept and used 34 Likert-type scales in its measurement.

[3]Copies of the questionnaire are available from the authors on request.

[4]Nunnally's formula ($\bar{r}_{kk} = \underline{k\bar{r}_{ij}} / 1 + (n-1)\ \underline{\bar{r}_{ij}}$) is computed by multiplying the number of items in a measure by the average correlation among all the items, divided by 1 plus the number of items minus one, times the average correlation. Pearson product-moment correlations are transformed, via Fisher's $\underline{Z_r}$ procedure, before summing in the averaging step, and the average $\underline{Z_r}$ score is then transformed to the equivalent Pearson product-moment correlation before use in Nunnally's reliability formula 6-18 (cf. Nunnally, 1967, 193-194; and Davis and Garrison's computer program, Note 18).

[5]Kaiser (1970: 405) reports that "MSA is a function of four 'main effects': (a) MSA improves as the number of variables increases. (b) MSA improves as the (effective) number of factors decreases. (c) MSA improves as the number of subjects increases. (d) MSA increases as the general level of correlation increases."

[6]These 11 dimensions are listed in Tables 8 and 9.

Table 1

Orthogonal Rotation of Factor Analysis

of 14 Interpersonal Valence Dimensions

Component	Dimension	Item Number[a] and Scale	Source for Selected Scales
Credibility	Sociability	1. Irritable - Good Natured	McCroskey, Jensen, & Valencia (Note 7)
		2. Cheerful - Gloomy	
		** Unsociable - Sociable	
		3. Friendly - Unfriendly	
	Extroversion	4. Timid Bold	
		5. Quiet - Verbal	
		** Talkative - Silent	
		** Aggressive - Meek	
	Composure	6. Nervous - Poised	
		7. Relaxed - Tense	
		8. Anxious - Calm	
		** Composed - Excitable	
	Competence	9. Expert - Inexpert	
		10. Unintelligent - Intelligent	
		** Narrow - Intellectual	
		** Unqualified - Qualified	
	Character	** Honest - Dishonest	
		** Unsympathetic - Sympathetic	
		** (Items omitted from instrument;	
		** typographical error)	
Trust	Trust	11. Trustworthy - Untrustworthy	Wheeless & Grotz (in press)
		12. Safe - Dangerous	
		13. Not Deceitful - Deceitful	
		14. Respectful - Disrespectful	
		15. Trustful of this person - Distrustful of this person	
		16. Considerate - Inconsiderate	
		17. Honest - Dishonest	
		18. Reliable - Unreliable	
		19. Faithful - Unfaithful	
		20. Sincere - Insincere	
Homophily	Background	21. Status Like Mine - Status Different From Mine	McCroskey, Richmond, & Daly (1975)
		22. From Social Class Different From Mine - Social Class Similar To Mine	
		** Culturally Different - Culturally Similar	
		23. Economic Situation Like Mine - Economic Situation Unlike Mine	
	Attitude	24. Like Me - Unlike Me	
		25. Different From Me - Similar To Me	
		** Thinks Like Me - Doesn't Think Like Me	
		** Doesn't Behave Like Me - Behaves Like Me	
	Value	** Morals Like Mine - Morals Unlike Mine	
		** Sexual Values Like Mine - Different From Mine	
Satisfaction	Satisfaction	** Rewarding - Punishing	Garrison & Sullivan (Note 19)
		26. Dissatisfying - Satisfying	
		** Unpleasant - Pleasant	
		** Smooth - Rough	
		** Enjoyable - Miserable	
		** Friendly - Unfriendly	
		27. Sad - Happy	
		28. Discontented - Contented	
		** Useless - Useful	
		** Boring - Interesting	
		** Secure - Insecure	
		** Excellent - Poor	
Power	Power	** Influential - Not Influential	V. Lashbrook (Note 14)
		** Powerful - Unpowerful	
		** Follower - Leader	
		** Not persuasive - Persuasive	
Attraction	Task	** I couldn't get anything accomplished with her/him	McCroskey & McCain (1974)
		** (S)He is a typical goof-off when assigned a job to do.	
		29. I have confidence in her/his ability to get the job done.	
		30. If I wanted to get things done I could depend on her/him.	
		31. (S)He would be a poor problem solver.	
	Physical	** I think (s)he is quite (pretty) handsome	
		** (S)He is very sexy looking.	
		32. I find her/him very attractive physically.	
		33. I don't like the way (s)he looks	
		34. (S)He is somewhat ugly.	
	Social	35. I think (s)he could be a friend of mine.	
		36. I would like to have a friendly chat with her/him.	
		** It would be difficult to meet and talk with her/him.	
		** We could never establish a personal friendship.	
		** (S)He just wouldn't fit into my circle of friends.	

[a]Numbered items indicate primary loading/item selected.

** Indicates item failed to meet a priori criteria

Table 2

Oblique Rotation of Factor Analysis

of 46 Semantic Differential-type Scales

Item Number[a] Keyed to Table 1	Factors							
	Sociability (1)	Extroversion (2)	Composure (3)	Competence (4)	Trust (5)	Background Homophily (6)	Attitude Homophily (7)	Satisfaction (8)
1	.63	-.15	.17	-.05	.25	.17	.07	-.01
2	.75	-.01	.25	.01	.12	-.07	.03	.07
**	.30	.23	-.00	-.10	.10	.08	-.09	.21
3	.60	.12	-.01	-.01	.14	.23	.02	.03
4	-.18	.65	.05	-.01	-.05	.09	.05	.15
5	-.01	.72	.00	-.10	.23	.12	.08	-.16
**	.30	.41	-.08	.05	.09	.02	.29	.18
**	.00	.51	.03	.26	.17	.23	-.10	.01
6	-.05	.05	.58	.26	-.13	-.02	-.18	.12
7	.36	.15	.63	-.08	-.16	.18	.07	.17
8	.01	.01	.57	-.22	.00	.25	.01	.05
**	.01	-.22	.45	.18	.11	.02	.14	-.05
9	.15	-.05	.04	.69	.15	-.04	.08	.21
10	-.11	.09	.12	.58	.26	.13	.13	.09
**	.10	.16	.02	.12	.29	.14	.03	.11
**	.10	.07	.03	.22	.02	-.18	-.03	.10
11	.18	.13	-.06	.15	.63	.25	-.09	.09
12	.13	.28	.09	.05	.73	.01	-.01	-.03
13	-.06	.08	.06	.03	.78	-.18	.15	-.07
14	.08	-.09	.04	.16	.65	-.01	.06	.02
15	.10	.14	.12	.04	.69	.22	-.05	.04
16	.13	.29	.05	.07	.72	-.16	.11	.07
17	.16	.14	-.06	.02	.95	.14	-.02	-.05
18	.23	.11	.15	.06	.82	-.02	-.09	.06
19	.03	.10	.10	.10	.88	-.03	.04	.02
20	.06	.09	.21	-.10	.60	-.11	-.10	.22
21	-.08	.02	-.13	.08	-.06	.57	.18	-.10
22	.09	-.05	.04	.27	.09	.60	-.06	.10
**	-.09	.06	.16	.05	.04	.23	.09	.34
23	.14	.06	.06	-.03	.06	.58	-.01	-.08
24	.17	-.08	.05	-.05	.13	.01	.65	-.01
25	.16	-.11	-.18	-.10	-.05	.01	.85	.04
**	.05	.23	.12	.00	.05	.25	.32	-.06
**	.02	.25	.02	.22	-.05	-.05	.45	.27
**	-.00	.02	.00	.04	.41	-.13	.20	.37
26	.16	.04	.11	.13	-.09	-.19	.06	.75
**	.27	.07	.09	-.15	.06	.05	.06	.53
**	.18	.01	.14	.03	.01	.25	-.08	.37
**	-.04	-.14	.05	.07	.37	.03	.19	.28
**	.06	.11	-.13	.02	.53	.02	-.02	.18
27	.17	-.07	.16	.04	.17	.01	-.02	.72
28	.06	.05	.20	.07	.21	.12	.09	.59
**	-.07	.18	-.08	-.05	.15	.09	.09	.36
**	.05	.06	.02	.01	.10	-.02	.10	.41
**	.17	-.03	.06	.06	.15	-.21	.11	.32
**	-.20	.14	.01	-.01	.28	-.20	.14	.42
N = 194								
Eigenvalues after rotation	4.30	2.19	2.15	1.65	11.06	2.98	2.20	1.33
% of Total Variance (96%)	15.4%	7.7%	7.6%	5.8%	36.6%	10.6%	7.8%	4.6%
Nunnally's (1967) Reliability Formula	.70	.63	.65	.66	.96	.69	.82	.78
Measure of Sampling Adequacy = .88								

[a]Numbered items indicate primary loadings/item selected

**Item failed to meet a priori loading criteria

Table 3

Oblique Rotation of Factor Analysis

of 15 Likert-type Scales

Item Number[a] Keyed to Table 1	Factors		
	Task Attraction (1)	Physical Attraction (2)	Social Attraction (3)
**	-.49	-.18	.13
**	-.35	-.41	.19
29	.62	-.15	.12
30	.79	-.06	-.05
31	.70	.08	.05
**	-.01	.00	.00
**	.04	.14	.10
32	-.07	-.68	.02
33	-.06	.67	.01
34	-.07	.73	.01
35	.17	-.03	.67
36	-.05	.08	.65
**	-.04	.04	.18
**	.03	.11	-.00
**	.00	.06	-.00
N = 194			
Eigenvalues after Rotation	8.58	1.43	1.01
% of Total Variance (93%)	72.2%	12.1%	8.4%
Nunnally's (1967) Reliability Formula	.76	.74	.69

Measure of Sampling Adequacy = .91

[a]Numbered items indicate primary loading/item selected

**Item failed to meet a priori loading criteria

Table 4

Stepwise Multiple Discriminant Analysis:

Full Nine Variable Model

Step Number	Variable Entered	F ratio[a]	df
1	Satisfaction	17.17	3/190.00
2	Trust	10.28	6/378.00
3	Composure	7.83	9/457.69
4	Competence	6.52	12/495.05
5	Social Attraction	5.58	15/513.87
6	Attitude Homophily	4.98	18/523.74
7	Task Attraction	4.54	21/528.90
8	Sociability	4.12	24/531.23
9	Extroversion	3.78	27/532.62

[a]Of entire model at that step

Note. All discriminators are significant at the $p<.001$ level.

Table 5

Discriminant Classification Matrix

For Nine Predictor Dimensions

Actual Group	N of Cases	(Acq)	(Fri)	(Cow)	(Fam)
Acquaintance (Acq)	48	15 31.2%	15 31.2%	9 18.7%	9 18.7%
Friend (Fri)	64	8 12.5%	32 50.0%	10 15.6%	14 21.9%
Co-worker (Cow)	41	4 9.8%	3 7.3%	25 61.0%	9 22.0%
Family (Fam)	41	6 14.6%	8 19.5%	4 9.8%	23 56.1%
	N = 194				

Total Correct Classification = 95
Percentage = 48.97%
Note. Prior Probabilities are listed in Tables 7 and 10.

Table 6

Stepwise Multiple Discriminant Analysis:

Full 26 Step Equation

Step Number	Variable Entered	F ratio[a]	df
1	Sad-Happy	18.84	3/190.00
2	Trustworthy-Untrustworthy	12.32	6/378.00
3	Anxious-Calm	10.06	9/457.69
4	I find her/him very attractive	8.21	12/495.05
5	Expert-Inexpert	7.34	15/513.87
6	Sincere-Insincere	6.43	18/523.74
7	Safe-Dangerous	5.81	21/528.90
8	Cheerful-Gloomy	5.37	24/531.23
9	Faithful-Unfaithful	5.04	27/532.62
10	Honest-Dishonest	4.82	30/532.30
11	Timid-Bold	4.61	33/531.82
12	Friendly-Unfriendly	4.42	36/530.62
13	Different From Me-Like Me	4.23	39/527.90
14	Relaxed-Tense	4.08	42/524.68
15	Unintelligent-Intelligent	3.97	45/526.30
16	If I wanted to get things done I probably could depend on her/him	3.85	48/521.46
17	I would like to have a friendly chat with her/him	3.77	51/518.92
18	Like Me-Unlike Me	3.65	54/516.31
19	Trustful of this person-Distrustful of this person	3.53	57/514.63
20[b]	Different From Me-Like Me	3.69[b]	54/516.31
21	Irritable-Good Natured	3.58	57/514.63
22	Considerate-Inconsiderate	3.47	60/511.87
23[b]	Honest-Dishonest	3.59[b]	57/514.63
24	(S)He is somewhat ugly	3.49	60/511.87
25	I don't like the way (s)he looks	3.39	63/508.21
26	Nervous-Poised	3.30	66/506.78

[a]Of entire model at that step

[b]Item Failed to meet entry criteria and was removed from model.

Note. All discriminators are significant at the $p<.001$ level.

Table 7

Discriminant Classification Matrix

Full 26 Step Equation

Actual Group		N of Cases	Predicted Group Membership (Acq)	(Fri)	(Ccw)	(Fam)
Acquaintance	(Acq)	48	27 56.2%	6 12.5%	5 10.4%	10 20.8%
Friend	(Fri)	64	3 4.7%	42 65.6%	6 9.4%	13 20.3%
Co-worker	(Cow)	41	1 2.4%	5 12.2%	31 75.6%	4 9.8%
Family	(Fam)	41	6 14.6%	7 17.1%	4 9.8%	24 58.5%
		N = 194				

Total Correct Classifications = 124

Percentage = 63.9

Prior Probabilities:

Acquaintance	.2474
Friend	.3299
Co-worker	.2113
Family	.2113

Table 8

Dimension Means by Communication Context

	Dimension	(Acq)	(Fri)	(Cow)	(Fam)	Row Means
1.	Trust (10 items)	56.60	59.63	48.56	62.85	56.22
2.	Sociability (3 items)	17.60	17.52	14.93	17.95	17.08
3.	Satisfaction (3 items)	16.46	18.17	13.56	17.76	16.69
4.	Task Attraction (3 items)	16.31	17.84	14.83	17.02	16.65
5.	Physical Attraction (3 items)	16.29	17.05	15.02	17.59	16.55
6.	Composure (3 items)	14.90	15.52	12.02	15.15	14.55
7.	Social Attraction (2 items)	11.96	12.36	10.51	13.12	12.03
8.	Background Homophily (3 items)	11.89	11.56	12.66	13.66	12.31
9.	Competence (2 items)	9.94	10.47	10.10	11.37	10.45
10.	Extroversion (2 items)	9.35	10.28	9.76	10.05	9.89
11.	Attitude Homophily (2 items)	8.46	9.27	8.12	9.12	8.79
	Column Means =	198.21	199.66	170.01	205.63	191.11

Note. (Acq) = Acquaintance

(Fri) = Friend

(Cow) = Co-worker

(Fam) = Family

Table 9

Factor Correlation Matrix

Dimension[a]		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Sociability	(1)	1.00	-.04	.09	.15	.45	-.05	.32	.44	.28	.17	.22
Extroversion	(2)	-.04	1.00	.00	.13	.00	-.01	.02	.20	.12	.16	.12
Composure	(3)	.09	.00	1.00	.30	.08	-.02	.19	.04	.11	.08	-.05
Competence	(4)	.15	.13	.30	1.00	.31	.09	.16	.13	.28	.10	.05
Trust	(5)	.45	.00	.08	.31	1.00	.12	.26	.40	.34	.09	.21
Background Homophily	(6)	-.05	-.01	-.02	.09	.12	1.00	.02	-.06	-.09	-.02	-.02
Attitude Homophily	(7)	.32	.02	.19	.16	.26	.02	1.00	.37	.27	.19	.26
Satisfaction	(8)	.44	.20	.04	.13	.40	-.06	.37	1.00	.32	.17	.36
Task Attraction	(9)	.28	.12	.11	.28	.34	-.09	.27	.32	1.00	.46	.43
Physical Attraction	(10)	.17	.16	.08	.10	-.09	-.02	.19	.17	.46	1.00	.43
Social Attraction	(11)	.22	.12	-.05	.05	-.21	-.02	.26	.30	.43	.43	1.00

[a]Dimension order keyed to Table 1.

Table 10

Percentage of Correct Classifications

(Comparison of Tables 6 and 8)

	Acquaintance	Friend	Co-worker	Family
Significant Dimensions	31.2	50.0	61.0	56.1
Significant Items	56.2	65.6	75.6	58.5

Note. Dimension correct classifications = 95 of 194 or 48.97%.

Item correct classifications = 124 of 194 or 63.9%.

Prior Probabilities:

Acquaintance	.2474
Friend	.3299
Co-worker	.2113
Family	.2113